GOVERNMENT OF INDIA
SCIENCE AND TECHNOLOGY
LOK SABHA

UNSTARRED QUESTION NO:2086
ANSWERED ON:16.03.2005
DEVELOPMENT OF GENETIC TRANSFORMATION SYSTEM FOR MOSQUITO
Adsul Shri Anandrao Vithoba;Badiga Shri Ramakrishna;Tripathy Shri Braja Kishore

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether the scientists have developed genetic transfonnation system for the mosquito (Anopheles stephensi) causing malaria;

(b) if so, the details thereof; and

(c) the steps taken for eradication of Malaria?

Answer

MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF SCIENCE & TECHNOLOGY AND MINISTER OF STATE (INDEPENDENT CHARGE) OF THE DEPARTMENT OF OCEAN DEVELOPMENT (SHRI KAPIL SIBAL)

(a) & (b) : Yes Sir, a group of scientists from UK, Germany and Greece have developed a stable germ1ine transformation system for the mosquito (Anopheles stephensi) causing malaria which was published in Nature (Vol.405, June 22, 2000). The genetic transformation technology will be usefull to investigate the molecular aspects of malaria parasite transmission for control of the disease.

(c): Several steps have been initiated to eradicate malaria in the country through active surveillance, early diagnosis and prompt treatment, anti-vectur and anti-larval control measures. The government also initiated several projects for development of potential candidate vaccines for both P.falciparum and P.vivax and also development of novel anti-malarial drugs.